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WARE FRESSOLA VAN DER SLUYS &  
ADOLPHSON, LLP  
BRADFORD GREEN BUILDING 5  
755 MAIN STREET, P O BOX 224  
MONROE, CT 06468

EXAMINER

GRAYSAY, TAMARA L

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/774,538

Applicant(s)

ABRAHAMS ET AL.

Examiner

Tamara L. Graysay

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12 Jul 2002.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The Office no longer checks the date of execution of the declaration. In accordance with MPEP § 602.05, applicants are reminded that they have a continuing duty of disclosure under 37 CFR 1.56.

### ***Drawings***

2. The drawings are objected to
  - a. because the reference character KB, located at the center portion of Fig.1A, is not defined.
  - b. because the steps represented by the third, fourth, and fifth blocks in Fig.5 are not described in the detailed description of the invention; moreover, the fourth and fifth blocks in Fig.5 are exactly the same, however, the disclosure does not provide any detailed description of the repetitiveness.
  - c. because the detailed description of Fig.7 does not include discussion of each of the elements depicted in the figure.
  - d. as failing to comply with 37 CFR 1.84(p)(4) because
    - i. reference characters "C" and "C<sub>Q</sub>" have both been used to designate corrective control;
    - ii. reference character "C" and "C<sub>R</sub>" have both been used to designate preventive control; and,

Art Unit: 3623

- iii. reference character “C” has been used to designate the calculated data item (P.30, L.10-11), and both preventive control and corrective control (P.30, L.13-14).
  - e. as failing to comply with 37 CFR 1.84(i) because the words in Fig.9A, Fig.9B, and Fig.9c do not appear in a horizontal, left-to-right fashion when the page is either upright or turned so that the top becomes the right side.
  - f. as failing to comply with 37 CFR 1.84(u)(1) because the different views depicted in Fig.1B must be numbered separately. A bracket may be used for an exploded view in accordance with 1.84(h)(1); however, the subject matter depicted in Fig.1B is not an exploded view.
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

4. The disclosure is objected to because of the following informalities:

Art Unit: 3623

- a. the brief description of Fig.3 (P.5, L.9-10) is inconsistent with the detailed description of Fig.3 (P.23, L.19-20);
- b. reference characters 11 and 12 are not included in Fig.1B, however, they are mentioned in the specification (P.10, L.7-8) regarding Fig.1B;
- c. the detailed description of Fig.4 lacks explanation of the “fallback” and “redundant” elements depicted in the figure;
- d. the detailed description of Fig.5 lacks explanation of the third and fourth steps depicted in the figure; and,
- e. reference should be made to Fig.9C in the detailed description (e.g., P.31, L.25).

Appropriate correction is required.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

As recited in claim 8, the residual risk impact cost is claimed as aggregated over the residual cost of each consequence of the risk. The specification at P.15, L.17, provides antecedent basis for the claimed term; however, the specification at P.15, L.17-22, defines the residual risk impact cost as the product of the inherent likelihood, ... and the inherent cost of the risked event, aggregated over all ... controls. The specification, as originally filed does not provide clear antecedent basis for the claimed subject matter – residual risk impact cost.

Art Unit: 3623

6. The use of trademarks (for example, Windows Explorer, Microsoft, Microsoft Windows, Windows) has been noted in this application. The trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the recitation of “a generic risk record” at line 8-9 is confusing since the term was recited previously in claim 1. The term must be related to or distinguished from “a generic risk record” recited at line 3-4.

Regarding claim 2, the recitation of “some of the risk record fields” at line 1 is confusing since the terms “generic risk record fields” and “profile risk record fields” are recited in antecedent. The term “some of the risk record fields” has been interpreted as some of either the generic risk record fields or the profile risk record fields.

Regarding claim 4, the recitation of the term “some fields” at line 2 is confusing insofar as claim 1, lines 4-5, recites “a plurality of different fields” associated with the generic risk records, and claim 1, line 8, recites “same plurality of fields” associated with

Art Unit: 3623

the profile risk records. It is unclear whether the fields recited in claim 2 are the fields associated with generic risk records, profile risk records, or both.

Regarding claim 5, the recitation of “a generic risk record” at line 1 is confusing since the term was recited previously in claim 1. The term in claim 5 must be related to or distinguished from “a generic risk record” recited at claim 1, line 3-4. Also, the recitation of “a profile risk record” at line 2 is confusing since the term was recited previously in claim 1. The term in claim 5 must be related to or distinguished from “a profile risk record” recited at claim 1, line 7-8.

Regarding claim 6, the term “the inherent risk impact cost” lacks clear antecedent basis. The claims provide antecedent basis for an inherent risk rating and an inherent cost of the particular consequence, but not inherent risk impact cost.

Regarding claim 7, the term “the inherent likelihood” lacks clear antecedent basis.

Regarding claim 8, the term “the residual risk impact cost” lacks clear antecedent basis. The claims provide antecedent basis for a residual risk rating and a residual cost of the particular consequence, but not residual risk impact cost.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2, 4, 5, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Mulholland (article, Risk assessment in construction schedules).

Regarding claim 1, Mulholland discloses a system for providing an analysis of use in managing risk, the system comprising: a knowledge base, for maintaining generic risk records, a generic risk record including a plurality of different fields (HyperCard knowledge base in Fig.5; previous project experience in Fig.2; historical data discussed at P.11, C.1, L.5); a data store of profiles, for maintaining profile risk records associated with a particular profile, profile risk record including the same plurality of fields as the generic risk record, the profile risk records for use in providing a risk assessment in the associated profile (conceptual project schedule in Fig.2; estimate of project duration at P.11, C.1, L.8-12); a risk processor, for updating generic risk records based on profile risk records in the data store of profiles (three recursive steps at P.11, C.1, L.12-17); whereby the knowledge base includes generic risk records with field values that can be refined over time so as be useful providing a more accurate risk assessment any particular profile (changes in elements within the knowledge base model discussed at P.12, C.2, last paragraph; transfer project experience and institutional knowledge to new projects discussed at P.14, C.2, L.10-13).

Regarding claim 2, Mulholland discloses that some of the risk record fields are measuring fields input by the user, and some are calculated fields calculated by the system (the example provided at P.12, C.2, last two lines, the changes in an element [an input risk record field] will not significantly affect the project schedule [a calculated risk record field], for example), and the system allows different modes of analysis in which the fields that are the measuring fields differ (one analysis mode: reexamination of the



assumptions and identification of factors driving the construction schedule, and another analysis mode: recognition of hidden assumptions are discussed P.13, C.2, L.4-9).

Regarding claim 4, the Mulholland system is used in different modes of use (three phases, including engineering design, procurement, and site construction, discussed at P.9, C.1, L.47-49), and further wherein only some fields are required to be used in the risk management analysis, the fields that are required depending on the mode of use (each phase has its own unique set of variables and is differentiated from the other phases by work content discussed at P.9, C.1, L.49-51).

Regarding claim 5, Mulholland discloses both a generic risk record and a profile risk record comprise: a risk component, for indicating a risk, for indicating an inherent risk rating, and also for indicating a residual risk rating (schedule risks discussed at P.11, C.1, L.14 and potential schedule risks at P.11, C.1, L.37-41); a cause component, for indicating cause of the risk (table 3 at P.11 describes some cause components for various risks); a consequence component, for indicating a particular consequence the risk and the inherent and residual of the particular consequence (effects of risks are discussed at P.11, C.1, L.14-15 and modeling of the risks and obtaining the schedule risk profile based on the risks at noted at P.11, C.1, L.16-17); and a control indicating component, for indicating a control, for whether the control is corrective or preventive, and for indicating the effectiveness of the control (the term act or action is used as a control for managing risk; for example, manager acts quickly and decisively at P.14, C.1, L.4-5 and risk management action at P.14, C.1, L.22-23).

Art Unit: 3623

Regarding claim 9, Mulholland further comprising a scripting facility for enabling a user to create a script directing how a risk management process be performed, the script indicating steps that can be used in performing risk analysis in any profile (computers are used for assessment of schedule risks and the navigational links within the system can be defined by the user as discussed at P.12, under the headings Application of Computers and HyperCard Information System for Risk Identification).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulholland in view of a prior art admission by applicant(s).

Mulholland discloses choosing a mode of assessment as discussed with respect to claim 2 above; however, Mulholland lacks the particulars of the mode of assessment as recited in claims 3 and 6-8.

Applicant discloses as prior art the use of aggregated calculations in risk assessment (P.24, L.18-19), which are particularly recited in claims 3 and 6-8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mulholland to include aggregated calculations for risk assessment such as those that were “widely used ... and ... not unique” at the time of the invention, such as taught

Art Unit: 3623

by the prior art admission by applicant(s), in order to compute and thus quantify the risk and the consequence associated with the risk.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Bankier (US-6567814) teaches the use of linked data to create a project plan.
- Fagg (US-5978784) teaches the use of an iterative process for assisting management decision-making.
- Masch (US-5930762) teaches the use of decision-making tools for determining a course of action to optimize risk management.
- Eisenberg (US-5594637) teaches the use of historical or knowledge base generic data which is compared to actual data to assess risk; the knowledge base generic data is refined over time by actual data. [Member of WO-9427490-A2 patent family (cited by applicant).]
- Austin (US-5950175) teaches a user input of data and calculation of risk associated with the data. [Member of FR-2752472-A1 patent family (cited by applicant).]
- Parris (article, Risk assessment – defining the process) teaches a risk assessment process that utilizes quantitative analysis of risk factors.
- Hall (article, Acceptable risk: a need for periodic review) teaches goals and factors associated with risk analysis.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara L. Graysay whose telephone number is (703) 305-1918.

Art Unit: 3623

The examiner can normally be reached on Monday – Thursday and alternate Fridays from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached on 703-305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
tg  
**TARIQ R. HAFIZ**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3600**